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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/508,912  | 09/23/2004  | Bernard Grehan       | 92936               | 8162             |
| 24628 7590 04/06/2009<br>Husch Blackwell Sanders, LLP<br>Husch Blackwell Sanders LLP Welsh & Katz<br>120 S RIVERSIDE PLAZA<br>22ND FLOOR<br>CHICAGO, IL 60606 |             |                      |                     |                  |
| EXAMINER  |             |                      |                     |                  |
| NGUYEN, NAM V   |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 2612  |             |                      |                     |                  |
| MAIL DATE   |             | DELIVERY MODE        |                     |                  |
| 04/06/2009  |             | PAPER                |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/508,912

**Applicant(s)**

GREHANT, BERNARD

**Examiner**

Nam V. Nguyen

**Art Unit**

2612

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10 and 12-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10 and 12-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This communication is in response to applicant's Amendment which is filed December 10, 2008.

An amendment to the claim 10 has been entered and made of record in the application of record in the application of Grehant for "remote control device for an actuator" filed September 23, 2004.

Claims 10 and 12-18 are now pending in the application.

### ***Response to Arguments***

Applicant's amendments to the rejected claims are insufficient to distinguish the claimed invention from the cited prior arts or overcome the rejection of said claims under 35 U.S.C § 103(a) as discussed below. Applicant's amendment and argument with respect to the pending Claims 10 and 12-18, filed December 10, 2008, have been fully considered but they are not persuasive for at least the following reasons.

On page 5, Applicant's arguments with respect to the invention in Kasuga does not teach or suggest transmit a program directly executable by the processing unit is not persuasive.

As defined by claim 1, the authoring system (100) of Kasuga transmits a mnemonic code called "RCODE". when an RCODE action-control program or encrypted program (i.e. a

processing program) is transmit to the robot (1) (i.e. a processing unit) by means of radio communication. The robot (1) includes a control unit (20) (i.e. a microprocessor) to interpret the encrypted program to output command to the driving-control unit (50). The driving-control unit (50) drive the robot (1) in accordance with the result of interpretation by the control unit (20) (column 3 lines 17 to 32; column 8 lines 26 to 32; column 9 lines 3 to 29; see Figures 1 to 5). Clearly, Kasuga discloses the control unit of the robot directly processes the encrypted program transmitted by the authoring system. In other words, the processing program being stored in the command transmitter in a form directly executable by a microprocessor of the processing unit.

On pages 6-7, Applicant's arguments with respect to the invention in Kasuga that the functionality cannot be improved is not persuasive.

The RCODE program of Kasuga et al. can be created and edited by the authoring tool system (100) (column 8 lines 26 to 32; column 11 lines 16 to 27; see Figures 6 to 16). The action control program created and edited by using the authoring tool is transferred to the robot 1 by using a radio communication means. In other words, an organized combination of the authoring tool and the robot creates an authoring system for the action control program for the robot. Clearly the functionalities of the robot can be improved by the authoring tool. Furthermore, each driver of the robot is a program code for operating each joint actuator and another type of hardware, the authoring tool can edited and created individually of each driver by the graphical user interface in the authoring tool (column 11 lines 44 to column 12 line 27; see Figures 6 to 7). Clearly, the robot's functionality depends on the RCODE program executable by the control unit of the robot.

On page 7, Applicant's arguments with respect to the invention in Kasuga that the transferred program stored in RAM is not persuasive.

Kasuga disclose a system include a RAM (22) and it used to load the transferred program code to be executed by the CPU (21) and to temporarily store work data (column 8 lines 5 to 8). Clearly, Kasuga does not disclose transferred program stored in RAM or store in RAM permanently in order to operate the robot. Furthermore, the CPU uses a RAM to operate efficiently. Without the RAM, the robot still able to operate with the program codes load directly to the CPU 21. In other words, RCODE program code still executable by CPU or the control unit of the robot.

Furthermore, applicant's amended "system to improve, on site, ...at the time of its installation." to the claim. These limitations are in the preamble. The recitation "system to improve, on site, ...at the time of its installation" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

On page 7, last paragraph, Applicant's arguments with respect to the invention in Rein in view of Kasuga is not obvious is not persuasive.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need for transmit an action-control program to the robot that executed by the operating system of the robot taught by Kasuga et al. in the wireless communication system of Rein et al. because using the mnemonic code action-control program to control the remote device would improve efficiency in control components of a wireless communication system.

Referring to Claims 17-18, Rein in view of Kasuga et al. disclose all the limitations as discuss same as above.

The examiner maintains that the references cited and applied in the last office actions for the rejection of the claims are maintained in this office action.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 12-15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rein et al. (US# 5,390,206) in view of Kasuga et al. (US# 6,470,235).

Referring to claim 10, Rein et al. discloses a wireless communication system (32) to improve, on site, the existing functionality of an equipment of a building, making it possible to

confer on the equipment new functionalities that were not installed in this equipment at the time of its installation, the equipment remotely controlling a control damper (74) or a load (406) (i.e. a variable speed fan, an air conditioning unit, a light or other similar devices) (column 10 lines 39 to 54; see Figures 6 to 10 and 24), the system comprising:

A control receiver (66) and a controller (68) (i.e. a processing unit) (column 12 lines 39 to 65; see Figures 4 and 24);

A zone sensor (58) or a personal zone sensor (110) (i.e. a command transmitter) (column 8 lines 39 to 62; column 9 lines 6 to 20; see Figures 1-4 and 21-22);

The wireless communication system (32) being configured to transfer to the control receiver (66) from the zone sensor (58) via a transmitter (65) a data packet directly executable by the control receiver (66) that alters how the controller (68) operate the control damper (74) or the load (406); said data packet being stored in the zone sensor (58) in a form directly executable by the controller (68) (column 9 lines 57 to 66; column 12 line 56 to column 13 line 2; column 21 lines 5 to 34; see Figures 6 and 10 and 21-24).

However, Rein et al. did not explicitly disclose a processing program directly executable by a microprocessor the processing unit that alters how the processing unit operates the actuator.

In the same field of endeavor of remote control communication system, Kasuga et al. teach mnemonic code action-control program (i.e. a processing program) directly executable by a control unit (20) (i.e. a microprocessor) with interpreter of the robot (1) (i.e. the processing unit) that alters how the robot (i.e. the processing unit) operates robot's components (i.e. the actuator) (column 8 lines 26 to 32; column 9 lines 3 to 29; column 11 lines 55 to column 13 line 38; see

Figures 1 to 17) in order to provide and to support relatively easy and efficient creation and editing of a robot-action sequence through interactive processing program.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need for transmit an action-control program to the robot that executed by the operating system of the robot taught by Kasuga et al. in the wireless communication system of Rein et al. because using the mnemonic code action-control program to control the remote device would improve efficiency in control components of a wireless communication system.

Referring to Claim 12, Rein et al. in view of Kasuga et al. disclose the system according to claim 10, Rein et al. disclose wherein the control receiver (66) and a controller (68) (i.e. the processing unit), a TX transmitter (65) of a zone sensor (58) (i.e. a radio transmitter), and the load (406) (i.e. the actuator) define a communication, processing unit and actuation unit, said radio transmitter configured to communicate in a reception mode and in a transmission mode with any radio frequency device sharing the same the same transmission protocol (column 26 lines 67 to column 27 to line 10; see Figures 4-7 and 21-24), wherein the communication, processing and actuation unit is configured to receive, store, and execute data packet (i.e. the processing program) (column 21 lines 5 to 61).

Referring to Claim 13, Rein et al. in view of Kasuga et al. disclose the system according to claim 12, Rein et al. disclose wherein the control receiver (66) and a controller (68) comprises a data controller (362) and a controller logic (404) (i.e. a microprocessor) which executes data



packet (i.e. program) contained in a memory (364) (i.e. a program memory) having at least one reprogrammable portion (column 19 lines 52 to 66; see Figures 12-13 and 23-24).

Referring to Claims 14-15, Rein et al. in view of Kasuga et al. disclose the system according to claim 13, Rein et al. disclose wherein a memory (408) (i.e. a non-erasable program memory) contains a storage area configured to store at least one code segment relating to the type of hardware installed in the processing unit (68) (column 10 lines 51 to 61; column 23 line 58 to column 24 line 2; see Figure 24).

Referring to Claims 17-18, Rein et al. in view of Kasuga et al. disclose the method, to the extent as claimed with respect to claim 10 above, and Rein et al. disclose the method including: a zone sensor identification code (190) or a personal zone sensor identification code (220) (i.e. the identification code) being stored in memory (408) (i.e. an electrically reprogrammable memory) of the controller (68) (i.e. the processing unit) (column 12 lines 21 to 68; see Figures 6, 9, 13 and 19-24).

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rein et al. (US# 5,390,206) in view of Kasuga et al. (US# 6,470,235) as applied to claim 10 above, and further in view of McNair et al. (US# 5,595,342).

Referring to claim 16, Rein et al. in view of Kasuga et al. disclose the system according to claim 10, however, Rein et al. in view of Kasuga et al. did not explicitly disclose wherein the command transmitter includes a two-way transmitter.

In the same field of endeavor of control communication system, McNair et al. teach that a hand held control includes a two-way transmitter (column 6 lines 43 to 57; see Figures 8 and 12) in order to obtain the status of detect confirmation of receipt signal from the main control centre.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need for a zone sensor to have a transceiver or receiver to receive status information from the main control centre taught by McNair et al. in a personal zone sensor to indicate status of the control data packet send to the controller of Rein et al. in view of Kasuga et al. because using a bidirectional communication using the transceiver to receive status information from the controller would improve indication of the control signal transmitted in a wireless communication system.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 571-272-3061. The examiner can normally be reached on Mon-Fri, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman can be reached on 571- 272-3059. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/N. V. N./  
Examiner, Art Unit 2612

/Brian A Zimmerman/  
Supervisory Patent Examiner, Art Unit 2612